J. Helminthol. Soc. Wash.
63(2), 1996, pp. 261–262

Research Note

An Anomaly (Gynandromorphism) in *Abbreviata* sp. (Nematoda: Physalopteridae)

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ABSTRACT: A single gynandromorphous *Abbreviata* sp. was recovered from the stomach of a black tree monitor, *Varanus beccarii,* from the Aru Islands, Indonesia.
KEY WORDS: gynandromorph, *Varanus,* anomaly, hermaphrodite, *Abbreviata.*

Anomalies in nematodes are seldom seen. Among anomalies reported for nematodes, those occurring in the reproductive system are by far the most common (Belogurov and Belogurova, 1979). In a review of 14 reports (1924–1989) on anomalies in nematodes, 10 dealt with abnormalities of the reproductive system (spicules, gubernacula, bursal rays, uteri, ovaries, and eggs) (Becklund, 1960; Andrews, 1970; Goldstein, 1977; Amin, 1989), whereas the other 4 dealt with abnormalities of the musculature or the digestive system (Lyons and Goldsmid, 1973); however, none described a gynandromorph. Most reported anomalies involve ascarids or strongylates, which possibly reflects frequency with which these nematodes are examined relative to other kinds of nematodes.

A black tree monitor (*Varanus beccarii*) had been wild-caught in the Aru Islands, Indonesia, and illegally shipped to the United States. When confiscated by authorities, the monitor was in very poor physical condition, and it died shortly thereafter. At necropsy, a single nematode specimen was found in the stomach and submitted to the Department of Veterinary Pathology, Iowa State University, for identification. After clearing in Hoyer's solution (Baker et al., 1956), the nematode was discovered to be a gynandromorphous *Abbreviata* sp. (Fig. 1). It was assumed that this bisexual condition represented an anomaly, because gynandromorphism is not a characteristic of nematodes and no gynandromorphs were mentioned in specimens of *Abbreviata* spp. commonly found in monitors (Jones, 1988).

The gynandromorph had a single uterus with a long vagina opening near the cloaca (precise site of this opening could not be seen). The uterus and vagina contained small (44 by 25 μm) embryonated eggs typical for the genus. Male components included a typical physalopterine bursa and dissimilar, unequal spicules (right = 350 μm, left = 2,200 μm). The parasite has been deposited in the U.S. National Parasite Collection (Accession No. 85054).

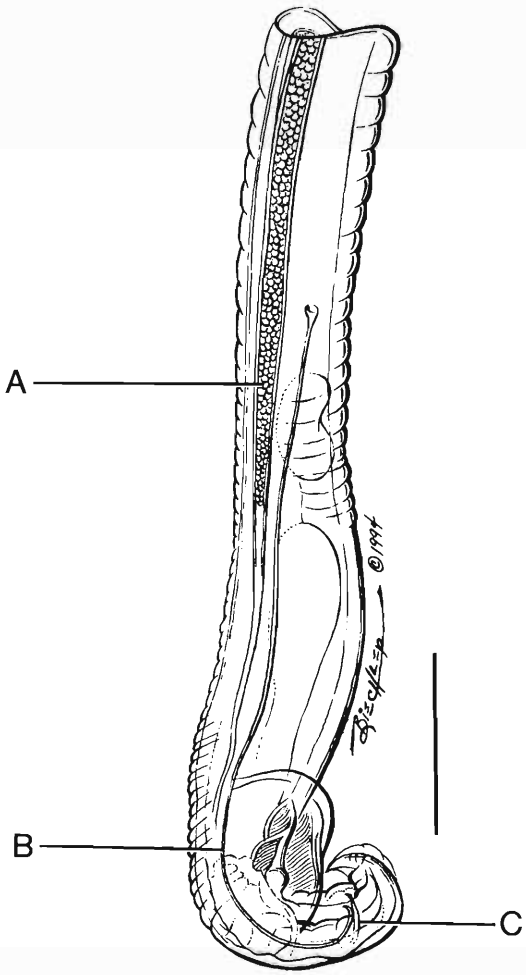

Figure 1. Outline drawing of posterior portion of gynandromorphous *Abbreviata* sp. from black tree monitor. Highlighted features are uterus (A), left spicule (B), and right spicule (C). Scale bar = 500 μm.

Furthermore, the finding of *Abbreviata* sp. in *Varanus beccarii* appears to be a new host record (Baker, 1987).

The author thanks Thomas P. Alvarado, D.V.M., Dallas, Texas for submitting this specimen.

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J. Helminthol. Soc. Wash.
63(2), 1996, pp. 262–265

Research Note

Helminth Parasites of the Osprey, *Pandion haliaetus*, in North America

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ABSTRACT: A total of 28 species of helminths (17 trematodes, 3 cestodes, 7 nematodes, and 1 acanthocephalan) was recovered from 17 ospreys (*Pandion haliaetus*) from the United States. Intensities of infection were low and no lesions were attributed to the parasites. Seven species appear to be specialists in ospreys, 2 species generalists in raptors, and the remainder generalists in other orders of fish-eating birds. *Pandiontrema rjikovi, Diasiella diasi,* and *Contracaecum pandioni* are reported for the first time from North America.

KEY WORDS: helminths, osprey, parasites, *Pandion haliaetus, Pandiontrema rjikovi, Diasiella diasi, Contracaecum pandioni.*

The osprey, *Pandion haliaetus* (Linnaeus), is a cosmopolitan, monotypic member of the family Falconidae comprising its own subfamily, Pandioninae. Ospreys breed primarily in the Northern Hemisphere (North America and Eurasia) and winter in the Southern Hemisphere (South America, Africa, and India), with the exception of 2 nonmigratory subspecies in the Caribbean and Indonesia (Poole, 1989). Although this predominantly fish-eating raptor was considered threatened in North America in the 1960's because of pesticide contamination of the food chain, it has made a strong recovery and is now common in many parts of its former range (Ewins, 1994).

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